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3M INNOVATIVE PROPERTIES COMPANY
PO BOX 33427
ST. PAUL, MN 55133-3427

EXAMINER

VARGOT, MATHIEU D

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/732,993
Filing Date: December 11, 2003
Appellant(s): SPURGEON ET AL.

Robert V. Heiti
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed May 5, 2008 appealing from the Office action mailed November 19, 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,060,003	KARSZES	5-2000
4,701,019	FITZPATRICK	10-1987

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 8, 10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Karszes (see 122, 124, 49 and 42 in Fig. 1; Fig. 2; see col. 3, line 62 through col. 4, line 25).

Karszes (see col. 3, line 42 through col. 4, line 25) discloses the instant process of extruding first (10) and second (14) materials to form molten first and second films—ie, layers in a composite stream 49-- that are maintained in a molten state, patterning the molten second film to form a plurality of structures (see 192 in Fig. 2) that have a plurality of cavities therebetween and solidifying the molten second film. It is submitted that the instant step of “bringing the molten first film proximate the molten second film”

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would be inherent in the passage of the material flows as they proceed out of black box 122—where they first contact each other (see col. 4, line 1)-- through film forming conduit 126 in die 128 to be extruded out die opening 124. See Figure 1. In other words, the fact that a composite film is formed in Karszes would lead one to believe that the molten materials are combined as a film in the black box and proceed out of the black box as a composite film. Instant claim 1 does not recite any particular order of steps, but merely that the materials be extruded in a molten state to form films and that the molten films be brought proximate each other at some point. As the flow of material from the black box 122 goes into a film forming die, it would be reasonable to assume that the flow out of the black box is that of a film, with the first molten film being brought proximate to the second molten film when and as the first and second molten materials are brought into contact to form these films. Materials 10 and 14 would both be a polycarbonate (see col. 3, lines 43-55) and hence claim 4 is anticipated. The structures formed on film 14 would be considered to be ribs. Instant claim 10, which further defines claim 1, is clearly anticipated by Karszes, with the first material 10 being extruded proximate a nip roll (40 in Fig.1 and apparently misnumbered as 48 in Fig. 2) and the second material being extruded proximate a cast roll (42), the extrusion of the materials being performed simultaneously. The process of Karszes would require that instant claim 12 be met.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4 and 8-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karszes.

As noted supra, it is submitted that Karszes anticipates the basic claimed process. If not, then the basic claimed process is obvious thereover. For instance, if the step of “bringing the molten first film proximate the molten second film” as set forth in instant claim 1 is not anticipated by Karszes, then surely it is obvious thereover. Karszes discloses a “black box” (122) combiner for the flows of molten material (see col. 4, line 1) and the material then proceeds down conduit 126 in die 128. Certainly, when the materials reach conduit 126, they are converted into a film flow, since the exit out the die is that of a film. Once they exit the die, they are extruded as first and second molten films in a composite stream. If the claims are more strictly limited to extrusion of the materials to form films and then the bringing of the molten first film proximate the molten second film **after the extrusion is complete**—as appellant argues-- then such is submitted to have been obvious over Karszes. It is nothing but conventional in the art to employ separate extruders for molten materials to form individual films and then combine the films in a downstream die to form a composite film (as set forth in instant claim 32) or to extrude molten materials separately through different film forming dies and then combine the films so that one is brought proximate to the other and these methods would be obvious equivalents for what is taught in Karszes. It is respectfully submitted that instant claim 1, if not anticipated by Karszes, is obvious thereover since it is within the skill level of the art to employ known methods to extrude and combine

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molten film materials to make a composite film. At most, the instant claims differ from Karszes only in that the applied reference does not expressly show that molten films are first formed and then brought proximate **after they have been formed**-- or as argued by appellant-- **extruded**. It is believed that instant claim 1 is broader than this, being readable on bringing molten films proximate each other prior to completing the extrusion and it is submitted that Karszes anticipates this. However, for reasons already noted, if claim 1 is not anticipated by Karszes, then it is obvious thereover. Clearly, Karszes brings at least two molten materials into proximity with each other and then later extrudes these materials as first and second films in a composite film. Having the materials form of a film when they are brought into proximity with each other would appear to be anticipated or obvious over Karszes, since the materials being extruded as the composite film are not intended to mix to any appreciable extent. This is quite evident since Karszes discloses the materials as layers that are intended to adhere together—the composite stream results in a sheet 30 (col. 3, line 43) that is made of three layers of molten coextruded material (col. 4, lines 16-17). Since the layers remain discrete, they would more than likely be brought into contact as individual films or otherwise mixing of the resins would undoubtedly occur during the conversion of the flow to a film flow. Also, since the layers of molten material are intended to maintain their integrity, it would matter little if they were brought into proximity before exiting the die or afterwards. Employing light diffusing particles in the second material would have been an obvious feature in Karszes dependent on the exact optical effect desired for the final film. Karszes shows the embossed film emerging from the process as arrow C

(see Fig. 1) and it would be nothing but conventional to wind the film onto a carrier roll.

The exact materials for the cast roll, carrier roll and nip roll would have been obvious in that it is within the skill level to pick and choose suitable materials for these rolls.

Karszes teaches (col. 5, line 45 through col. 6, line 3) chilled rolls for the nip and cast roll. It is within the skill level of the art to cool or heat these rolls dependent on the exact nature of the material being embossed between the rolls and the instant methods of heating are well known. The exact temperature to which the rolls would be heated is submitted to have been within the skill level of the art and readily determined through routine experimentation dependant on the flow properties of the materials.

Claims 2, 3 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karszes in view of Fitzpatrick.

Karszes discloses the basic claimed process as set forth supra, the primary reference essentially lacking the aspect of filling the cavities with a light absorbing optical material—ie, black pigment—and laminating a hard coat shield over the structures and optical material. Fitzpatrick discloses making an optical film (screen) wherein light absorbing particles are filled into cavities between projections on the screen, the particles serving to enhance image contrast (see col. 1, lines 27-30). It would have been obvious to one of ordinary skill in the art to modify the process of Karszes by filling the cavities between the structures with a light absorbing optical material in order to form a screen of enhanced image contrast. Black pigments are of course light absorbing and would have been an obvious choice for the light absorbing optical material. The application of a shield or hard coating over the structures and

optical material is submitted to have been an obvious feature in the combination to ensure that the optical material stays in the cavities where it belongs and to protect the structures from damage. Such topcoats are well known in the optical art and are conventionally employed to protect the optical structures that would then lie below the topcoat.

(10) Response to Argument

Appellant submits that Karszes does not teach every element of claim 1 and hence claims 1, 4, 8, 10 and 12 cannot be anticipated. However, such is simply not agreed with. While the flows that go **into** black box 122 may not reasonably be said to constitute films, the flow **out of** black box 122 would almost of necessity have to be in a film form, since this flow goes directly to conduit 126, which is the passage the molten material takes to be extruded from die 124 as a film. Since the individual molten material flows have already been combined in the black box, it is either inherent or obvious that they be combined therein as a film flow. Any other arrangement would not have allowed the formation of a composite film with distinct layers as taught in Karszes. The actual extrusion of the films—as a composite film—occurs downstream when the composite film exits die 124. Appellant is correct in stating that there is no disclosure as to the form of the materials inside the black box. However, for reasons already given, the point of contact of the molten materials would most probably be that of a film in the black box. Appellant explains that the instant process keeps the first and second molten materials isolated from each other until they are extruded from the die.

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However, it should be noted that the instant claims are not so limited. There is nothing that requires that the films be isolated from each other, but merely that they are extruded, maintained in the molten state and brought into proximity to each other.

There is no explicit order for the steps, so if Karszes performs these steps, albeit in a different order, the reference would still anticipate claim 1. As already noted, it is believed that Karszes does indeed do this, and hence a 102 rejection is submitted to be proper. However, even if instant claims 1, 4, 8, 10 and 12 are ultimately deemed to be novel, it is respectfully submitted that they would be obvious over Karszes. The formation of separate molten films that are kept isolated from each other until after they are extruded (as appellant argues but does not necessarily claim) is submitted to have been obvious over the admittedly ambiguous disclosure of the black box of Karszes. As already noted, one of ordinary skill in this art knows of various conventional methods to extrude molten materials into films and the instant argued method is nothing but an obvious variant over that shown in Karszes. Appellant suggests that it is well known that “resins in contact” that flow through a die are different from separated molten films which are brought proximate after they leave a die—see page 8, lines 20-21. Appellant goes on to discuss mixing of the resins that would occur in the former. However, nowhere in Karszes is mixing of the resins ever considered or discussed. By using different formulations for the outer/inner and middle resin materials, Karszes desires to laminate the materials together. Karszes calls them layers of material—see column 3, lines 42-61. It is rather clear that no mixing is taking place, other than some interfacial mixing that would occur whenever two molten streams are brought together, either prior

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to exiting a die or afterwards. Hence, any differences due to mixing are purely conjecture on the part of appellant and should be given little weight. It is respectfully submitted that the instant claims are either anticipated by Karszes, or obvious thereover, in combination with Fitzpatrick as necessary, for reasons set forth.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Mathieu D. Vargot/

Primary Examiner, Art Unit 1791

Conferees:

/Christina Johnson/

Supervisory Patent Examiner, Art Unit 1791

/Steven P. Griffin/

Supervisory Patent Examiner, Art Unit 1791

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